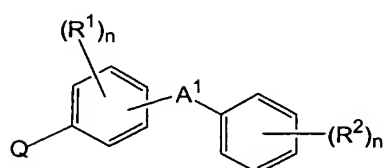


Amendments to the Claims:

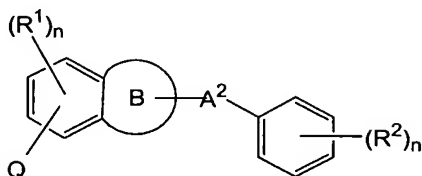
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

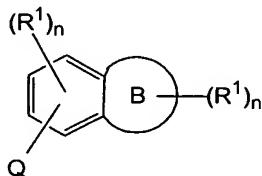
1. (Original) A compound having the formula:



(I)



(II)



(III)

or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is CF_3SO_2 , $\text{CF}_3\text{SO}_2\text{NR}^3$, $\text{CF}_3\text{SO}_2\text{R}^4$ or $\text{CF}_3\text{SO}_2\text{N}(\text{R}^3)\text{R}^4$, wherein R^3 is H, alkoxy, acyl or C_1 - C_3 alkyl, each of which may be substituted or unsubstituted, and R^4 is methylene which may be substituted or unsubstituted;

each R^1 is independently C_1 - C_3 alkyl, C_1 - C_3 haloalkyl, CN, $(\text{C}=\text{O})\text{OR}$, $(\text{C}=\text{O})\text{R}^5$, H, halo, $\text{O}(\text{C}=\text{O})\text{R}$, OR, OH, NHR, $\text{NH}(\text{C}=\text{O})\text{OR}$, $\text{NH}(\text{C}=\text{O})\text{R}^5$, NO_2 , NHSO_2R^5 , SO_2R^5 , $\text{R}^4\text{SO}_2\text{CF}_3$ or tetrazole, wherein R^5 is CF_3 , C_1 - C_3 alkyl, NHR and wherein R is H, C_1 - C_3 alkyl, aryl or heteroaryl, which may be substituted or unsubstituted;

each R^2 is independently C_1 - C_3 alkyl, C_1 - C_3 haloalkyl, CN, $(\text{C}=\text{O})\text{OR}$, $(\text{C}=\text{O})\text{R}^5$, H, halo, $\text{O}(\text{C}=\text{O})\text{R}$, OR, OH, NHR, $\text{NH}(\text{C}=\text{O})\text{OR}$, $\text{NH}(\text{C}=\text{O})\text{R}^5$, NO_2 , NHSO_2R^5 , SO_2R^5 , tetrazole, or $\text{X}^1\text{-R}^6\text{-X}^2$, wherein X^1 is present or absent and if present is O, N, $(\text{C}=\text{O})$, $(\text{C}=\text{O})\text{NH}$, $\text{NH}(\text{C}=\text{O})$, SO_2NH , NHSO_2 , R^6 is C_1 - C_3 alkylene which may be substituted or unsubstituted and X^2 is CF_3 , $(\text{C}=\text{O})\text{OR}$, $(\text{C}=\text{O})\text{R}^5$, H, $\text{NH}(\text{C}=\text{O})\text{R}^5$, $\text{NH}(\text{C}=\text{O})\text{OR}$, NHSO_2R^5 , NRR^3 , $\text{O}(\text{C}=\text{O})\text{R}$, OR, SO_2R^5 , tetrazole;

each n is independently from 0 to 3;

ring B is an aryl, carbocyclic, heteroaryl, heterocyclic or phenyl ring which may be substituted or unsubstituted;

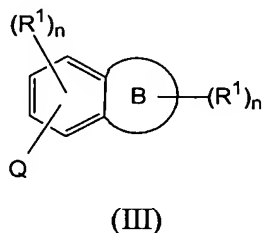
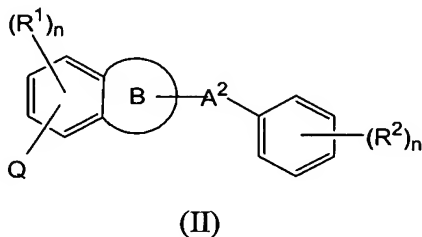
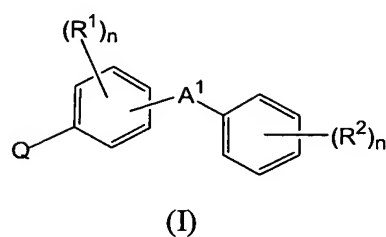
A¹ is a linkage in which the shortest path is 2-8 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with a single nitrogen or oxygen, or combination of nitrogen, oxygen and sulfur provided no two heteroatoms are adjacently linked in a linear linkage; the linkage may be or may contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which may be directly in the linkage or appended to the linkage; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene, alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkyloxy, alkyloxyaryloxyalkyl, C₁-C₆ alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, C₁-C₆ N-sulfonamido, C₃-C₇ N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl, aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, ortho or para aryldioxy, substituted meta-aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxy carbonyl, aryloxy sulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C₃-C₇ C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, disulfide, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, C₂-C₆ S-sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy, sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, C₃-C₆ ureido, which may be substituted or unsubstituted; and

A² is a linkage in which the shortest path is 0-6 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with a single nitrogen, oxygen or sulfur, or combination of nitrogen, oxygen and sulfur; the linkage may be or may contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which

may be directly in the linkage or appended to the linkage; the linkage may be single atom C, O, S or N which may be substituted or unsubstituted; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene, alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkyloxy, alkyloxyaryloxyalkyl, alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, N-sulfonamido, N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl, aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, ortho or para aryldioxy, substituted meta-aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxycarbonyl, aryloxysulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy, sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, ureido, which may be substituted or unsubstituted.

2. (Original) The compound of claim 1 wherein Q is CF_3SO_2 .
3. (Original) The compound of claim 1 wherein Q is $\text{CF}_3\text{SO}_2\text{NR}^3$.
4. (Original) The compound of claim 1 wherein Q is $\text{CF}_3\text{SO}_2\text{R}^4$.
5. (Original) The compound of claim 1 wherein Q is $\text{CF}_3\text{SO}_2\text{N}(\text{R}^3)\text{R}^4$.
6. (Original) The compound of claim 1 wherein the compound has formula I.

7. (Original) The compound of claim 1 wherein the compound has formula II.
8. (Original) The compound of claim 1 wherein the compound has formula III.
9. (Original) The compound of claim 1 wherein R^2 is SO_2R^5 , $NHSO_2R^5$ or $CF_3SO_2R^4$.
10. (Original) A compound having the formula:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is CF_3SO_2 ;

each R^1 is independently CF_3 , $(C=O)OR$, $(C=O)R^5$, H, halo, NHR , $NH(C=O)OR$, $NH(C=O)R^5$, $NHSO_2R^5$, NO_2 , $O(C=O)R$, OH, OR, SO_2R^5 or tetrazole, wherein R^5 is CF_3 , C1-C3 alkyl, NHR and wherein R is H, C1-C3 alkyl, aryl or heteroaryl, which may be substituted or unsubstituted;

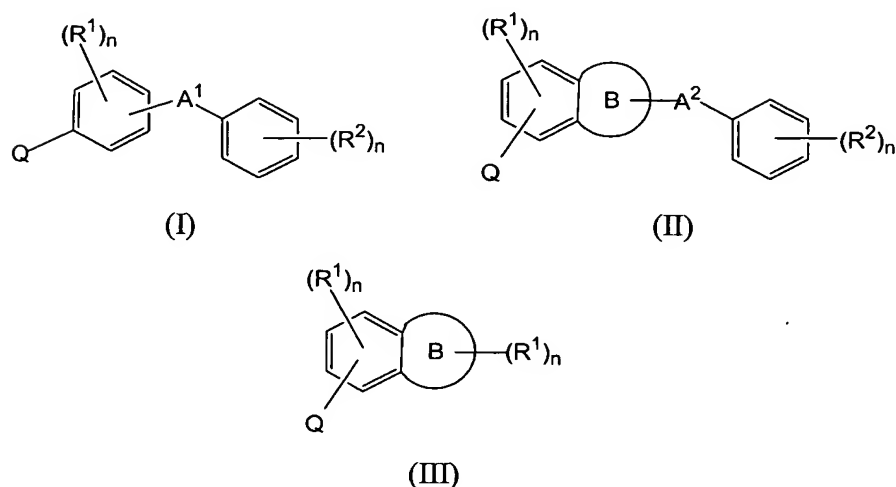
each R^2 is independently $(C=O)OR$, $(C=O)R^5$, $NH(C=O)OR$, $NH(C=O)R^5$, NHR , $NHSO_2R^5$, NO_2 , $-R^6-(C=O)OR$, $-R^6-NRR^3$, $-R^6$ -tetrazole, or tetrazole and R^6 is C1-3 alkylene which may be substituted or unsubstituted;

each n is independently from 0 to 2;

ring B is phenyl or heteroaryl which may be substituted or unsubstituted; and

linkage A1 is C2-C4 alkoxy, C2-C4 alkoxyalkyl, C2-C4 alkylenedioxy, C2-C4 alkylaminoalkyl, C2-C4 alkylenediamine, C3-C4 C-amido, C3-C4 N-amido, C3-C4 ureido, C1-C3 N-sulfonamido, C2-C3 S-sulfonamido, aryldioxy, aryldiamine, aryl, alkylarylalkyl, imidazole, oxazole, oxadiazole, pyrazole, pyrazolidine, pyrrole or triazole.

11. (Original) A compound having the formula:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is $CF_3SO_2NR^3$, $CF_3SO_2R^4$ or $CF_3SO_2N(R^3)R^4$, wherein R^3 is H, alkoxy, acyl or C1-C3 alkyl each of which may be substituted or unsubstituted and R^4 is methylene which may be substituted or unsubstituted;

each R^1 is independently CF_3 , $(C=O)OR$, $(C=O)R^5$, H, halo, NHR , $NH(C=O)OR$, $NH(C=O)R^5$, $NHSO_2R^5$, NO_2 , $O(C=O)R$, OH , OR , SO_2R^5 or tetrazole, wherein R^5 is CF_3 , C1-C3 alkyl, NHR and wherein R is H, C1-C3 alkyl, aryl or heteroaryl, which may be substituted or unsubstituted;

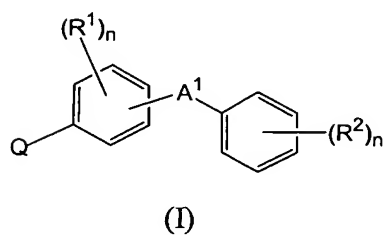
each R^2 is independently $(C=O)OR$, $(C=O)R^5$, $NH(C=O)OR$, $NH(C=O)R^5$, NHR , $NHSO_2R^5$, NO_2 , SO_2R^5 , $-R^6-(C=O)OR$, $-R^6-NRR^3$, $-R^6$ -tetrazole, or tetrazole and R^6 is C1-3 alkylene which may be substituted or unsubstituted;

each n is independently from 0 to 2;

ring B is phenyl or heteroaryl which may be substituted or unsubstituted; and

linkage A1 is C2-C4 alkoxy, C2-C4 alkoxyalkyl, C2-C4 alkylenedioxy, C2-C4 alkylaminoalkyl, C2-C4 alkylenediamine, C3-C4 C-amido, C3-C4 N-amido, C3-C4 ureido, C1-C3 N-sulfonamido, C2-C3 S-sulfonamido, aryldioxy, aryldiamine, aryl, alkylarylalkyl, imidazole, oxazole, oxadiazole, pyrazole, pyrazolidine, pyrrole or triazole.

12. (Original) A compound having the formula:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

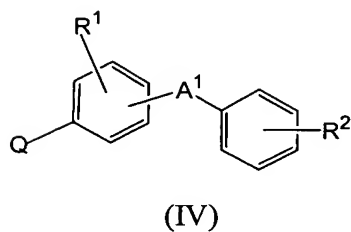
Q is CF_3SO_2 ;

each R1 is independently H, NHR, NO_2 or OR;

each R2 is independently $(\text{C}=\text{O})\text{OR}$, NHSO_2R_5 , or SO_2R_5 ;

each n is independently from 0 to 2; and the linkage A1 is alkylarylalkyl, C2-C4 alkoxyalkyl, C2-C4 alkylenedioxy, aryl, aryldiamine, aryldioxy, or oxadiazole which may be substituted or unsubstituted or A1 is unsubstituted or monosubstituted C2-C4 N-amido.

13. (Original) The compound of claim 11 having the formula:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

R1 is H or NO_2 ;

R2 is $(\text{C}=\text{O})\text{OR}$, NHSO_2R_5 or SO_2R_5 ; and

the linkage A1 is C2-C4 alkoxyalkyl, aryldioxy, aryl, alkylarylalkyl or oxadiazole.

14. (Original) The compound of claim 12 wherein the compound is:
- Bis(4-Trifluoromethylsulfonylbenzyl) ether;
- 4-Trifluoromethylsulfonylbenzyl 4-trifluoromethylsulfonylphenyl ether;
- N,N-Bis(4-trifluoromethylsulfonylbenzyl)benzamide;
- 1,2-Bis(4-trifluoromethylsulfonylphenyl)ethane;
- N-(4-Trifluoromethylsulfonylbenzyl)-4-trifluoromethylsulfonylbenzamide;
- N-(4-Trifluoromethylsulfonylbenzyl)benzamide;
- 3,5-Bis-(4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;
- [3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-phenyl]-acetic acid methyl ester;
- 3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;
- 1,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-cyclopentane;
- 4-Methyl-2,6-bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;
- 4-[2-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-ethoxy]-benzoic acid methyl ester;
- 4-[3-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-phenoxy]-benzoic acid;
- 1-(3,5-Bis-trifluoromethyl-phenyl)-5-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-1H-pyrazole-3-carboxylic acid methyl ester;
- {4-[4-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid ethyl ester;
- 4-[3-(4-Trifluoromethanesulfonyl-phenoxy)-phenoxy]-benzoic acid;
- {4-[4-(4-Trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid ethyl ester;
- N-(3-Trifluoromethanesulfonyl-phenyl)-2-{2-[(3-trifluoromethanesulfonyl-phenyl)carbamoyl]-methyl}-phenyl}-acetamide;
- N-(3-Trifluoromethanesulfonyl-phenyl)-2-{3-[(3-trifluoromethanesulfonyl-phenyl)carbamoyl]-methyl}-phenyl}-acetamide;
- N-(3-Trifluoromethanesulfonyl-phenyl)-2-{4-[(3-trifluoromethanesulfonyl-phenyl)carbamoyl]-methyl}-phenyl}-acetamide;

3,6-Bis-(morpholin-4-ylmethyl)-2,5-bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzene;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-dimethyl-amine;

N-(2-Ethylamino-5-trifluoromethanesulfonyl-phenyl)-2-(4-methanesulfonyl-phenyl)-acetamide;

2-Hydroxy-5-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-terephthalic acid diethyl ester;

{2-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;

{3-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;

{4-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;

3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzamide;

3,5-Bis-(4-trifluoromethanesulfonyl-phenoxy)-benzoic acid;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{2-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{3-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{4-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoic acid methyl ester;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoic acid;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-pyridin-4-yl-benzamide;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-(4-methoxy-phenyl)-benzamide;

3-[4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoylamino]-benzoic acid ethyl ester;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-(2-pyrrolidin-1-yl-ethyl)-benzamide;

N-Ethyl-4-(1-ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzamide;

1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazole-2-carboxylic acid;

[2-(Benzoyl-butyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid methyl ester;

N-Benzyl-*N*-[butylcarbamoyl-(4-trifluoromethanesulfonyl-phenyl)-methyl]-benzamide;

N-[Butylcarbamoyl-(4-trifluoromethanesulfonyl-phenyl)-methyl]-*N*-(2-hydroxy-ethyl)-benzamide;

[2-(Acetyl-cyclopropyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Acetyl-methyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Benzoyl-cyclohexyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

N-Cyclohexyl-*N*-[(2,6-dimethyl-phenylcarbamoyl)-(4-trifluoromethanesulfonyl-phenyl)-methyl]-benzamide;

[2-(Acetyl-propyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Acetyl-cyclohexyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

{4-[4-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid;

4-[2-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-ethoxy]-benzoic acid;

2,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-terephthalic acid diethyl ester;

1-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-piperidine;

4-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-morpholine;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-(2-nitro-phenyl)-amine;

1-(2-Nitro-phenylamino)-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propan-2-ol;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-(4-nitro-phenyl)-amine;

1-(4-Nitro-phenylamino)-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propan-2-ol;

4-[2-Hydroxy-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propylamino]-benzenesulfonamide; or

4-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propylamino]-benzenesulfonamide.

15. (Original) The compound of claim 13 wherein the compound is:

1,2-Bis(4-trifluoromethylsulfonamidophenyl)ethane;

1,2-Bis(2-methyl-4-trifluoromethylsulfonamidophenyl)ethane;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)-2,2-dimethylpropane;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)propane;

1,4-Bis(4-trifluoromethylsulfonamidophenoxy)butane;

1,4-Bis(4-trifluoromethylsulfonamidophenoxy)benzene;

1-(4-Aminophenoxy)-4-trifluoromethylsulfonamidophenoxy benzene;

Bis(4-trifluoromethylsulfonamidophenyl) ether;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)benzene;

2,5-Bis(4-trifluoromethylsulfonamidophenyl)-(1,3,4)oxadiazole;

Bis(4-trifluoromethylsulfonamidophenyl)-1,4-diisopropylbenzene;

5-Trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetic acid;

1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid phenylamide;

5-Trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid phenylamide;

3-[(1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;

3-[(5-Trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;

4-[(5-Trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;

4-[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-benzoic acid;

3-[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-benzoic acid;

4- {[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-methyl}-benzoic acid;

(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetic acid *tert*-butyl ester;

1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;

6-Trifluoromethanesulfonylamino-naphthalene-2-carboxylic acid;

N,N-Bis[(6-carboxyl-naphthalen-2-yl)methyl] trifluoromethanesulfonamide;

6-[(Methyl-trifluoromethanesulfonyl-amino)-methyl]-naphthalene-2-carboxylic acid;

3-({6-[(Methyl-trifluoromethanesulfonyl-amino)-methyl]-naphthalene-2-carbonyl}-amino)-benzoic acid;

1-*tert*-Butoxycarbonylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;

1-Carboxymethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;

1-*tert*-Butoxycarbonylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

1-Carboxymethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

1-Carboxymethyl-5-(*N,N*-ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid ethyl ester;

1-*tert*-Butoxycarbonylmethyl-5-(*N,N*-ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid ethyl ester;

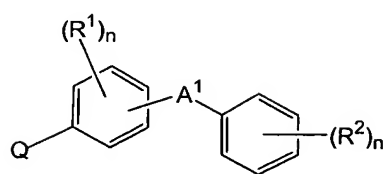
1-Carboxymethyl-5-(*N,N*- ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid;

1-Cyclohexylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;

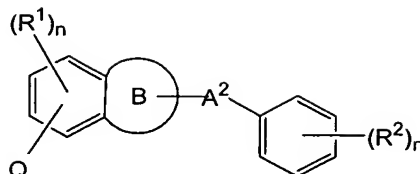
1-Benzyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid; or

1-Cyclohexylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid.

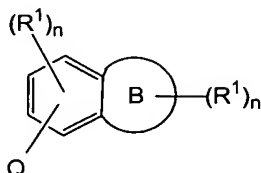
16. (Original) A pharmaceutical composition comprising a compound having the formula:



(I)



(II)



(III)

or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is CF_3SO_2 , $\text{CF}_3\text{SO}_2\text{NR}^3$, $\text{CF}_3\text{SO}_2\text{R}^4$ or $\text{CF}_3\text{SO}_2\text{N}(\text{R}^3)\text{R}^4$, wherein R^3 is H, alkoxy, acyl or C₁-C₃ alkyl, each of which may be substituted or unsubstituted, and R^4 is methylene which may be substituted or unsubstituted;

each R^1 is independently C₁-C₃ alkyl, C₁-C₃ haloalkyl, CN, (C=O)OR, (C=O)R₅, H, halo, NHR, NH(C=O)OR, NH(C=O)R₅, NO₂, NHSO₂R₅, O(C=O)R, OR, OH, SO₂R₅, R₄SO₂CF₃ or tetrazole, wherein R_5 is CF₃, C₁-C₃ alkyl, NHR and wherein R is H, C₁-C₃ alkyl, aryl or heteroaryl, which may be substituted or unsubstituted;

each R^2 is independently C₁-C₃ alkyl, C₁-C₃ haloalkyl, CN, (C=O)OR, (C=O)R₅, H, halo, O(C=O)R, OR, OH, NHR, NH(C=O)OR, NH(C=O)R₅, NO₂, NHSO₂R₅, SO₂R₅, tetrazole, or X₁-R₆-X₂ wherein X₁ may be present or absent and if present is O, N, (C=O), (C=O)NH, NH(C=O), SO₂NH, NHSO₂;

R₆ is C₁-3 alkylene which may be substituted or unsubstituted;

X₂ is CF₃, (C=O)OR, (C=O)R₅, H, NH(C=O)R₅, NH(C=O)OR, NHSO₂R₅, NRR₃, O(C=O)R, OR, SO₂R₅, tetrazole;

each n is independently from 0 to 3;

ring B is an aryl, carbocyclic, heteroaryl, heterocyclic or phenyl ring which may be substituted or unsubstituted;

A₁ is a linkage in which the shortest path is 2-8 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with

a single nitrogen or oxygen, or combination of nitrogen, oxygen and sulfur provided no two heteroatoms are adjacently linked in a linear linkage; the linkage may be or may contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which may be directly in the linkage or appended to the linkage; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene, alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkyloxy, alkyloxyaryloxyalkyl, C1-C6 alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, C1-C6 N-sulfonamido, C3-C7 N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl, aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxycarbonyl, aryloxysulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C3-C7 C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, disulfide, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, C2-C6 S-sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy, sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, C3-C6 ureido, which may be substituted or unsubstituted;

A² is a linkage in which the shortest path is 0-6 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with a single nitrogen, oxygen or sulfur, or combination of nitrogen, oxygen and sulfur; the linkage may be or may contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which may be directly in the linkage or appended to the linkage; the linkage may be single atom C, O, S or N which may be substituted or unsubstituted; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene, alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkyloxy,

alkyloxyaryloxyalkyl, alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, N-sulfonamido, N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl, aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, ortho or para aryldioxy, substituted meta-aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxycarbonyl, aryloxysulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy, sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, ureido, which may be substituted or unsubstituted.

17. (Original) The pharmaceutical composition of claim 16 wherein:

Q is CF_3SO_2 or $\text{CF}_3\text{SO}_2\text{NH}$;

each R1 is independently CF_3 , $(\text{C}=\text{O})\text{OR}$, $(\text{C}=\text{O})\text{R}_5$, H, halo, NHR , $\text{NH}(\text{C}=\text{O})\text{OR}$, $\text{NH}(\text{C}=\text{O})\text{R}_5$, NHSO_2R_5 , NO_2 , $\text{O}(\text{C}=\text{O})\text{R}$, OH, OR, SO_2R_5 or tetrazole;

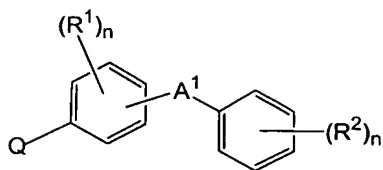
each R2 is independently $(\text{C}=\text{O})\text{OR}$, $(\text{C}=\text{O})\text{R}_5$, $\text{NH}(\text{C}=\text{O})\text{OR}$, $\text{NH}(\text{C}=\text{O})\text{R}_5$, NHR , NHSO_2R_5 , NO_2 , SO_2R_5 , $-\text{R}_6-(\text{C}=\text{O})\text{OR}$, $-\text{R}_6-\text{NRR}_3$, $-\text{R}_6$ -tetrazole or tetrazole;

each n is independently from 0 to 2;

ring B is phenyl or heteroaryl which may be substituted or unsubstituted; and

linkage A1 is C2-C4 alkoxy, C2-C4 alkoxyalkyl, C2-C4 alkylendioxy, C2-C4 alkylaminoalkyl, C2-C4 alkylenediamine, C3-C4 C-amido, C3-C4 N-amido, C3-C4 ureido, C1-C3 N-sulfonamido, C2-C3 S-sulfonamido, aryldioxy, aryldiamine, aryl, alkylarylalkyl, imidazole, oxazole, oxadiazole, pyrazole, pyrazolidine, pyrrole or triazole.

18. (Original) The pharmaceutical composition of claim 17 wherein the compound has the formula:



(I)

or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is CF_3SO_2 or $\text{CF}_3\text{SO}_2\text{NH}$;

each R^1 is independently H, NHR , NO_2 or OR ;

each R^2 is independently $(\text{C}=\text{O})\text{OR}$, or NHSO_2R^5 or SO_2R^5 ;

each n is independently from 0 to 2; and

the linkage A^1 is alkylarylalkyl, C2-C4 alkoxyalkyl, C2-C4 alkylendioxy, aryl, aryldiamine, aryldioxy or oxadiazole.

19. (Original) The pharmaceutical composition of claim 16 wherein the compound is:

Bis(4-Trifluoromethylsulfonylbenzyl) ether;

4-Trifluoromethylsulfonylbenzyl 4-trifluoromethylsulfonylphenyl ether;

N,N-Bis(4-trifluoromethylsulfonylbenzyl)benzamide;

1,2-Bis(4-trifluoromethylsulfonylphenyl)ethane;

N-(4-Trifluoromethylsulfonylbenzyl)-4-trifluoromethylsulfonylbenzamide;

N-(4-Trifluoromethylsulfonylbenzyl)benzamide;

3,5-Bis-(4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;

[3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-phenyl]-acetic acid methyl ester;

3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;

1,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-cyclopentane;

4-Methyl-2,6-bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;

4-[2-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-ethoxy]-benzoic acid methyl ester;

4-[3-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-phenoxy]-benzoic acid;

1-(3,5-Bis-trifluoromethyl-phenyl)-5-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-1*H*-pyrazole-3-carboxylic acid methyl ester;

{4-[4-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid ethyl ester;

4-[3-(4-Trifluoromethanesulfonyl-phenoxy)-phenoxy]-benzoic acid;

{4-[4-(4-Trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid ethyl ester;

N-(3-Trifluoromethanesulfonyl-phenyl)-2-{2-[(3-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

N-(3-Trifluoromethanesulfonyl-phenyl)-2-{3-[(3-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

N-(3-Trifluoromethanesulfonyl-phenyl)-2-{4-[(3-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

3,6-Bis-(morpholin-4-ylmethyl)-2,5-bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzene;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-dimethyl-amine;

N-(2-Ethylamino-5-trifluoromethanesulfonyl-phenyl)-2-(4-methanesulfonyl-phenyl)-acetamide;

2-Hydroxy-5-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-terephthalic acid diethyl ester;

{2-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;

{3-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;

{4-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;

3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzamide;

3,5-Bis-(4-trifluoromethanesulfonyl-phenoxy)-benzoic acid;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{2-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{3-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{4-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoic acid methyl ester;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoic acid;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-pyridin-4-yl-benzamide;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-(4-methoxy-phenyl)-benzamide;

3-[4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoylamino]-benzoic acid ethyl ester;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-(2-pyrrolidin-1-yl-ethyl)-benzamide;

N-Ethyl-4-(1-ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzamide;

1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazole-2-carboxylic acid;

[2-(Benzoyl-butyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid methyl ester;

N-Benzyl-*N*-[butylcarbamoyl-(4-trifluoromethanesulfonyl-phenyl)-methyl]-benzamide;

N-[Butylcarbamoyl-(4-trifluoromethanesulfonyl-phenyl)-methyl]-*N*-(2-hydroxy-ethyl)-benzamide;

[2-(Acetyl-cyclopropyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Acetyl-methyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Benzoyl-cyclohexyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

N-Cyclohexyl-*N*-[(2,6-dimethyl-phenylcarbamoyl)-(4-trifluoromethanesulfonyl-phenyl)-methyl]-benzamide;

[2-(Acetyl-propyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Acetyl-cyclohexyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

{4-[4-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid;

4-[2-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-ethoxy]-benzoic acid;

2,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-terephthalic acid diethyl ester;

1-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-piperidine;

4-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-morpholine;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-(2-nitro-phenyl)-amine;

1-(2-Nitro-phenylamino)-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propan-2-ol;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-(4-nitro-phenyl)-amine;

1-(4-Nitro-phenylamino)-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propan-2-ol;

4-[2-Hydroxy-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propylamino]-benzenesulfonamide; or

4-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propylamino]-benzenesulfonamide.

20. (Original) The pharmaceutical composition of claim 16 wherein the compound is:

1,2-Bis(4-trifluoromethylsulfonamidophenyl)ethane;

1,2-Bis(2-methyl-4-trifluoromethylsulfonamidophenyl)ethane;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)-2,2-dimethylpropane;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)propane;

1,4-Bis(4-trifluoromethylsulfonamidophenoxy)butane;

1,4-Bis(4-trifluoromethylsulfonamidophenoxy)benzene;

1-(4-Aminophenoxy)-4-trifluoromethylsulfonamidophenoxy benzene;

Bis(4-trifluoromethylsulfonamidophenyl) ether;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)benzene;

2,5-Bis(4-trifluoromethylsulfonamidophenyl)-(1,3,4)oxadiazole;

Bis(4-trifluoromethylsulfonamidophenyl)-1,4-diisopropylbenzene;
5-Trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;
1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;
(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetic acid;
1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid phenylamide;
5-Trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid phenylamide;
3-[(1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;
3-[(5-Trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;
4-[(5-Trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;
4-[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-benzoic acid;
3-[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-benzoic acid;
4-[[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-methyl]-benzoic acid;
(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetic acid *tert*-butyl ester;
1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;
6-Trifluoromethanesulfonylamino-naphthalene-2-carboxylic acid;
N,N-Bis[(6-carboxyl-naphthalen-2-yl)methyl] trifluoromethanesulfonamide;
6-[(Methyl-trifluoromethanesulfonyl-amino)-methyl]-naphthalene-2-carboxylic acid;
3-({6-[(Methyl-trifluoromethanesulfonyl-amino)-methyl]-naphthalene-2-carbonyl}-amino)-benzoic acid;
1-*tert*-Butoxycarbonylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;
1-Carboxymethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;
1-*tert*-Butoxycarbonylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;
1-Carboxymethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

1-Carboxymethyl-5-(*N,N*-ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid ethyl ester;

1-*tert*-Butoxycarbonylmethyl-5-(*N,N*-ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid ethyl ester;

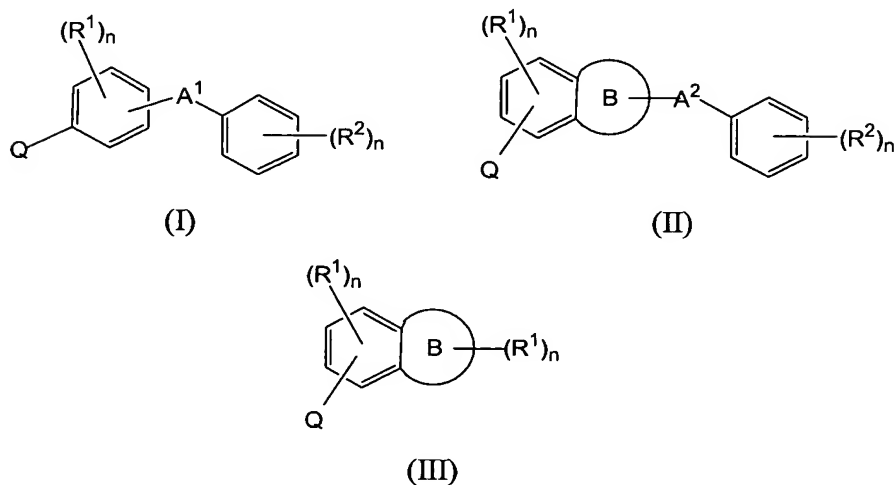
1-Carboxymethyl-5-(*N,N*- ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid;

1-Cyclohexylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;

1-Benzyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid; or

1-Cyclohexylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid.

21. (Original) A method for treating a protein tyrosine phosphatase signal transduction associated disorder in a mammal which comprises a administering to the mammal therapeutically effective amount of a compound having the formula:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is CF_3SO_2 , $\text{CF}_3\text{SO}_2\text{NR}^3$, $\text{CF}_3\text{SO}_2\text{R}^4$ or $\text{CF}_3\text{SO}_2\text{N}(\text{R}^3)\text{R}^4$, wherein R^3 is H, alkoxy, acyl or $\text{C}_1\text{-C}_3$ alkyl, each of which may be substituted or unsubstituted, and R^4 is methylene which may be substituted or unsubstituted;

each R^1 is independently $\text{C}_1\text{-C}_3$ alkyl, $\text{C}_1\text{-C}_3$ haloalkyl, CN, $(\text{C}=\text{O})\text{OR}$, $(\text{C}=\text{O})\text{R}_5$, H, halo, NHR , $\text{NH}(\text{C}=\text{O})\text{OR}$, $\text{NH}(\text{C}=\text{O})\text{R}_5$, NO_2 , NHSO_2R_5 , $\text{O}(\text{C}=\text{O})\text{R}$, OH, OR, SO_2R_5 ,

R₄SO₂CF₃ or tetrazole, wherein R₅ is CF₃, C₁-C₃ alkyl, NHR and wherein R is H, C₁-C₃ alkyl, aryl or heteroaryl, which may be substituted or unsubstituted;

each R₂ is independently C₁-C₃ alkyl, C₁-C₃ haloalkyl, CN, (C=O)OR, (C=O)R₅, H, halo, O(C=O)R, OR, OH, NHR, NH(C=O)OR, NH(C=O)R₅, NO₂, NHSO₂R₅, SO₂R₅, tetrazole, or X₁-R₆-X₂, wherein X₁ may be present or absent and if present is O, N, (C=O), (C=O)NH, NH(C=O), SO₂NH, NHSO₂, R₆ is C₁-3 alkylene which may be substituted or unsubstituted and X₂ is CF₃, (C=O)OR, (C=O)R₅, H, NH(C=O)R₅, NH(C=O)OR, NHSO₂R₅, NRR₃, O(C=O)R, OR, SO₂R₅, tetrazole;

each n is independently from 0 to 3;

ring B is an aryl, carbocyclic, heteroaryl, heterocyclic or phenyl ring which may be substituted or unsubstituted;

A₁ is a linkage in which the shortest path is 2-8 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with a single nitrogen, oxygen or sulfur, or combination of nitrogen, oxygen and sulfur; the linkage may be or may contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which may be directly in the linkage or appended to the linkage; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene, alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkyloxy, alkyloxyaryloxyalkyl, alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, N-sulfonamido, N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl, aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxycarbonyl, aryloxysulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, disulfide, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy,

sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, ureido, which may be substituted or unsubstituted;

A² is a linkage in which the shortest path is 0-6 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with a single nitrogen, oxygen or sulfur, or combination of nitrogen, oxygen and sulfur; the linkage may be or may contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which may be directly in the linkage or appended to the linkage; the linkage may be single atom C, O, S or N which may be substituted or unsubstituted; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene, alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkyloxy, alkyloxyaryloxyalkyl, alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, N-sulfonamido, N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl, aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, ortho or para aryldioxy, substituted meta-aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxycarbonyl, aryloxysulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, disulfide, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy, sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, ureido, which may be substituted or unsubstituted and a pharmaceutically acceptable carrier or excipient;

wherein said compound regulates, inhibits or modulates protein tyrosine phosphatase signal transduction.

22. (Original) The method of claim 21 wherein the protein tyrosine phosphatase signal transduction is associated with cancer, a solid tumor, glioma, melanoma, Kaposi's sarcoma, hemangioma, ovarian cancer, breast cancer, lung cancer, pancreatic cancer, liver cancer, prostate cancer, colon cancer, or epidermoid cancer.

23. (Original) The method of claim 21 wherein the protein tyrosine phosphatase signal transduction is associated with diabetes.

24. (Original) The method of claim 21 wherein the protein tyrosine phosphatase signal transduction is associated with neurological degenerative diseases.

25. (Original) The method of claim 21 wherein the protein tyrosine phosphatase signal transduction is associated with osteoporosis.

26. (Currently Amended) The method of claim 21, ~~21, 22, 23, 24 or 25~~ wherein the mammal is a human.

27. (Original) The method of claim 21 wherein Q is CF_3SO_2 .

28. (Original) The method of claim 21 wherein Q is $\text{CF}_3\text{SO}_2\text{NR}^3$.

29. (Original) The method of claim 21 wherein Q is $\text{CF}_3\text{SO}_2\text{R}^4$.

30. (Original) The method of claim 21 wherein Q is $\text{CF}_3\text{SO}_2\text{N}(\text{R}^3)\text{R}^4$.

31. (Original) The method of claim 21 wherein the compound has formula I.

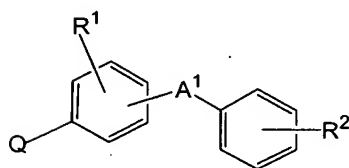
32. (Original) The method of claim 21 wherein the compound has formula II.

33. (Original) The method of claim 21 wherein the compound has formula III.

34. (Original) The method of claim 21 wherein R^2 is SO_2R^5 , $NHSO_2R^5$ or $CF_3SO_2R^4$.

35. (Original) The method of claim 21 wherein
 Q is CF_3SO_2 or CF_3SO_2NH ;
 each R_1 is independently CF_3 , $(C=O)OR$, $(C=O)R_5$, H, halo, NHR , $NH(C=O)OR$, $NH(C=O)R_5$, $NHSO_2R_5$, NO_2 , $O(C=O)R$, OH, OR, SO_2R_5 or tetrazole;
 each R_2 is independently $(C=O)OR$, $(C=O)R_5$, $NH(C=O)OR$, $NH(C=O)R_5$, NHR , $NHSO_2R_5$, NO_2 , SO_2R_5 , $-R_6-(C=O)OR$, $-R_6-NRR_3$, $-R_6$ -tetrazole or tetrazole;
 each n is independently from 0 to 2;
 ring B is phenyl or heteroaryl which may be substituted or unsubstituted; and
 linkage A1 is C1-C4 alkoxy, C2-C4 alkoxyalkyl, C2-C4 alkylenedioxy, C2-C4 alkylaminoalkyl, C2-C4 alkylenediamine, C1-C4 C-amido, C1-C4 N-amido, C1-C4 ureido, C0-C3 N-sulfonamido, C0-C3 S-sulfonamido, aryldioxy, aryldiamine, aryl, alkylarylalkyl, imidazole, oxazole, oxadiazole, pyrazole, pyrazolidine, pyrrole or triazole.

36. (Original) The method of claim 21 wherein the compound has the formula:



(IV)

or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is CF_3SO_2 or CF_3SO_2NH ;
 R_1 is H or NO_2 ;
 R_2 is $(C=O)OR$, $NHSO_2R_5$ or SO_2R_5 ; and
 the linkage A1 is C2-C4 alkoxyalkyl, aryldioxy, aryl, alkylarylalkyl, C1-C4 N-amido or oxadiazole.

37. (Original) The method of claim 21 wherein the compound is:

Bis(4-Trifluoromethylsulfonylbenzyl) ether;
4-Trifluoromethylsulfonylbenzyl 4-trifluoromethylsulfonylphenyl ether;
N,N-Bis(4-trifluoromethylsulfonylbenzyl)benzamide;
1,2-Bis(4-trifluoromethylsulfonylphenyl)ethane;
N-(4-Trifluoromethylsulfonylbenzyl)-4-trifluoromethylsulfonylbenzamide;
N-(4-Trifluoromethylsulfonylbenzyl)benzamide;
Bis(4-Trifluoromethylsulfonylphenyl) disulfide;
Bis-(2-Nitro-4-trifluoromethylsulfonylphenyl) disulfide;
3,5-Bis-(4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;
[3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-phenyl]-acetic acid methyl ester;
3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;
1,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-cyclopentane;
4-Methyl-2,6-bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;
4-[2-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-ethoxy]-benzoic acid methyl ester;
4-[3-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-phenoxy]-benzoic acid;
1-(3,5-Bis-trifluoromethyl-phenyl)-5-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-1H-pyrazole-3-carboxylic acid methyl ester;
{4-[4-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid ethyl ester;
4-[3-(4-Trifluoromethanesulfonyl-phenoxy)-phenoxy]-benzoic acid;
{4-[4-(4-Trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid ethyl ester;
N-(3-Trifluoromethanesulfonyl-phenyl)-2-{2-[(3-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;
N-(3-Trifluoromethanesulfonyl-phenyl)-2-{3-[(3-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;
N-(3-Trifluoromethanesulfonyl-phenyl)-2-{4-[(3-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

3,6-Bis-(morpholin-4-ylmethyl)-2,5-bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzene;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-dimethyl-amine;

N-(2-Ethylamino-5-trifluoromethanesulfonyl-phenyl)-2-(4-methanesulfonyl-phenyl)-acetamide;

2-Hydroxy-5-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-terephthalic acid diethyl ester;

{2-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;

{3-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;

{4-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;

3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzamide;

3,5-Bis-(4-trifluoromethanesulfonyl-phenoxy)-benzoic acid;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{2-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{3-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{4-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoic acid methyl ester;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoic acid;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-pyridin-4-yl-benzamide;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-(4-methoxy-phenyl)-benzamide;

3-[4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoylamino]-benzoic acid ethyl ester;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-(2-pyrrolidin-1-yl-ethyl)-benzamide;

N-Ethyl-4-(1-ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzamide;

1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazole-2-carboxylic acid;

[2-(Benzoyl-butyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid methyl ester;

N-Benzyl-*N*-[butylcarbamoyl-(4-trifluoromethanesulfonyl-phenyl)-methyl]-benzamide;

N-[Butylcarbamoyl-(4-trifluoromethanesulfonyl-phenyl)-methyl]-*N*-(2-hydroxy-ethyl)-benzamide;

[2-(Acetyl-cyclopropyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Acetyl-methyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Benzoyl-cyclohexyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

N-Cyclohexyl-*N*-[(2,6-dimethyl-phenylcarbamoyl)-(4-trifluoromethanesulfonyl-phenyl)-methyl]-benzamide;

[2-(Acetyl-propyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Acetyl-cyclohexyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

{4-[4-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid;

4-[2-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-ethoxy]-benzoic acid;

2,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-terephthalic acid diethyl ester;

1-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-piperidine;

4-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-morpholine;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-(2-nitro-phenyl)-amine;

1-(2-Nitro-phenylamino)-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propan-2-ol;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-(4-nitro-phenyl)-amine;

1-(4-Nitro-phenylamino)-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propan-2-ol;

4-[2-Hydroxy-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propylamino]-benzenesulfonamide;

4-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propylamino]-benzenesulfonamide; or

Bis- {[4-(2-nitro-4-trifluoromethanesulfonyl)-phenoxy]-phenyl} sulfone.

38. (Original) The method of claim 21 wherein the compound is:

1,2-Bis(4-trifluoromethylsulfonamidophenyl)ethane;

1,2-Bis(2-methyl-4-trifluoromethylsulfonamidophenyl)ethane;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)-2,2-dimethylpropane;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)propane;

1,4-Bis(4-trifluoromethylsulfonamidophenoxy)butane;

1,4-Bis(4-trifluoromethylsulfonamidophenoxy)benzene;

1-(4-Aminophenoxy)-4-trifluoromethylsulfonamidophenoxy benzene;

Bis(4-trifluoromethylsulfonamidophenyl) ether;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)benzene;

2,5-Bis(4-trifluoromethylsulfonamidophenyl)-(1,3,4)oxadiazole;

Bis(4-trifluoromethylsulfonamidophenyl)-1,4-diisopropylbenzene;

5-Trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetic acid;

1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid phenylamide;

5-Trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid phenylamide;

3-[(1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;

3-[(5-Trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;

4-[(5-Trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;

4-[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-benzoic acid;

3-[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-benzoic acid;

4-{[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-methyl}-benzoic acid;

(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetic acid *tert*-butyl ester;

1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;

6-Trifluoromethanesulfonylamino-naphthalene-2-carboxylic acid;

N,N-Bis[(6-carboxyl-naphthalen-2-yl)methyl] trifluoromethanesulfonamide;

6-[(Methyl-trifluoromethanesulfonyl-amino)-methyl]-naphthalene-2-carboxylic acid;

3-({6-[(Methyl-trifluoromethanesulfonyl-amino)-methyl]-naphthalene-2-carbonyl} -amino)-benzoic acid;

1-*tert*-Butoxycarbonylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;

1-Carboxymethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;

1-*tert*-Butoxycarbonylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

1-Carboxymethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

1-Carboxymethyl-5-(*N,N*-ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid ethyl ester;

1-*tert*-Butoxycarbonylmethyl-5-(*N,N*-ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid ethyl ester;

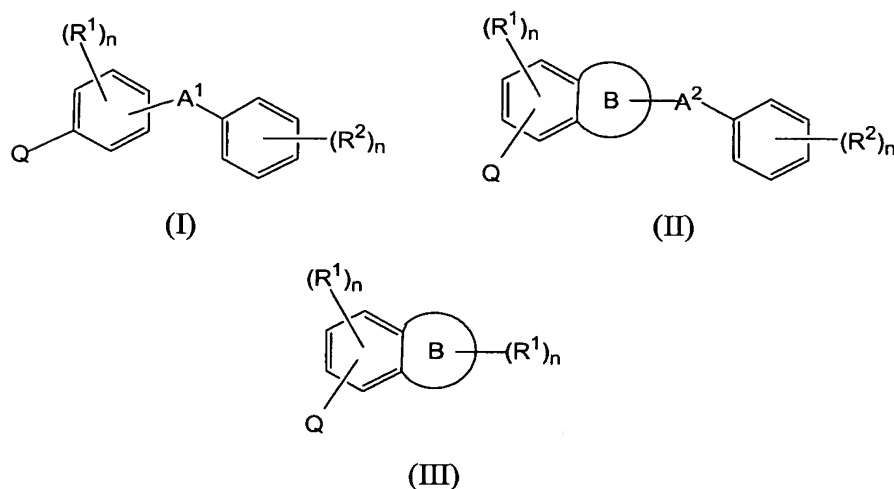
1-Carboxymethyl-5-(*N,N*- ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid;

1-Cyclohexylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;

1-Benzyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid; or

1-Cyclohexylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid.

39. (Original) A method for treating, alleviating or preventing cancer in a mammal which comprises administering to a mammal in need thereof a therapeutically effective amount of a compound having the formula:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is CF_3SO_2 , $CF_3SO_2NR^3$, $CF_3SO_2R^4$ or $CF_3SO_2N(R^3)R^4$, wherein R^3 is H, alkoxy, acyl or C₁-C₃ alkyl, each of which may be substituted or unsubstituted, and R^4 is methylene which may be substituted or unsubstituted;

each R^1 is independently C₁-C₃ alkyl, C₁-C₃ haloalkyl, CN, $(C=O)OR$, $(C=O)R^5$, H, halo, NHR , $NH(C=O)OR$, $NH(C=O)R^5$, NO_2 , $NHSO_2R^5$, $O(C=O)R$, OR , OH , SO_2R^5 , $R^4SO_2CF_3$ or tetrazole, wherein R^5 is CF_3 , C₁-C₃ alkyl, NHR and wherein R is H, C₁-C₃ alkyl, aryl or heteroaryl, which may be substituted or unsubstituted;

each R^2 is independently C₁-3 alkyl, C₁-C₃ haloalkyl, CN, $(C=O)OR$, $(C=O)R^5$, H, halo, $O(C=O)R$, OR , OH , NHR , $NH(C=O)OR$, $NH(C=O)R^5$, NO_2 , $NHSO_2R^5$, SO_2R^5 , tetrazole or $X1-R6-X2$, wherein $X1$ may be present or absent and if present is O, N, $(C=O)$, $(C=O)NH$, $NH(C=O)$, SO_2NH , $NHSO_2$, $R6$ is C₁-3 alkylene which may be substituted or unsubstituted and $X2$ is CF_3 , $(C=O)OR$, $(C=O)R^5$, H, $NH(C=O)R^5$, $NH(C=O)OR$, $NHSO_2R^5$, NRR^3 , $O(C=O)R$, OR , SO_2R^5 , tetrazole;

each n is independently from 0 to 3;

ring B is an aryl, carbocyclic, heteroaryl, heterocyclic or phenyl ring which may be substituted or unsubstituted;

A¹ is a linkage in which the shortest path is 2-8 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with a single nitrogen, oxygen, sulfur, or combination of nitrogen, oxygen and sulfur; the linkage may be or contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which may be directly in the linkage or appended to the linkage; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene, alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkoxy, alkyloxyaryloxyalkyl, alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, N-sulfonamido, N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl, aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxycarbonyl, aryloxysulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, disulfide, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy, sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, or ureido which may be substituted or unsubstituted;

A² is a linkage in which the shortest path is 0-6 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with a single nitrogen, oxygen or sulfur, or combination of nitrogen, oxygen and sulfur; the linkage may be or may contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which may be directly in the linkage or appended to the linkage; the linkage may be single atom C, O, S or N which may be substituted or unsubstituted; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene,

alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkyloxy, alkyloxyaryloxyalkyl, alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, N-sulfonamido, N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl, aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, ortho or para aryldioxy, substituted meta-aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxycarbonyl, aryloxysulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy, sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, ureido, which may be substituted or unsubstituted; and a pharmaceutically acceptable carrier or excipient.

40. (Original) The method of claim 39 wherein the mammal is a human.

41. (Original) The method of claim 39 wherein

Q is CF_3SO_2 or $\text{CF}_3\text{SO}_2\text{NH}$;

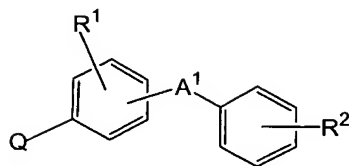
each R1 is independently CF_3 , $(\text{C}=\text{O})\text{OR}$, $(\text{C}=\text{O})\text{R}_5$, H, halo, NHR , $\text{NH}(\text{C}=\text{O})\text{OR}$, $\text{NH}(\text{C}=\text{O})\text{R}_5$, NHSO_2R_5 , NO_2 , $\text{O}(\text{C}=\text{O})\text{R}$, OH, OR, SO_2R_5 or tetrazole;

each R2 is independently $(\text{C}=\text{O})\text{OR}$, $(\text{C}=\text{O})\text{R}_5$, $\text{NH}(\text{C}=\text{O})\text{OR}$, $\text{NH}(\text{C}=\text{O})\text{R}_5$, NHR , NHSO_2R_5 , NO_2 , SO_2R_5 , $-\text{R}_6-(\text{C}=\text{O})\text{OR}$, $-\text{R}_6-\text{NRR}_3$, $-\text{R}_6$ -tetrazole or tetrazole;

each n is independently from 0 to 2;

ring B is phenyl or heteroaryl which may be substituted or unsubstituted; and linkage A1 is C1-C4 alkoxy, C2-C4 alkoxyalkyl, C2-C4 alkylenedioxy, C2-C4 alkylaminoalkyl, C2-C4 alkylenediamine, C1-C4 C-amido, C1-C4 N-amido, C1-C4 ureido, C0-C3 N-sulfonamido, C0-C3 S-sulfonamido, aryldioxy, aryldiamine, aryl, alkylarylalkyl, imidazole, oxazole, oxadiazole, pyrazole, pyrazolidine, pyrrole or triazole.

42. (Original) The method of claim 39 wherein the compound has the formula:



(IV)

or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is CF_3SO_2 or $\text{CF}_3\text{SO}_2\text{NH}$;

R1 is H or NO_2 ;

R2 is $(\text{C}=\text{O})\text{OR}$, NHSO_2R_5 or SO_2R_5 ; and

the linkage A1 is C2-C4 alkoxyalkyl, aryldioxy, aryl, alkylarylalkyl, C1-C4 N-amido or oxadiazole.

43. (Original) The method of claim 39 wherein the compound is:

Bis(4-Trifluoromethylsulfonylbenzyl) ether;

4-Trifluoromethylsulfonylbenzyl 4-trifluoromethylsulfonylphenyl ether;

N,N-Bis(4-trifluoromethylsulfonylbenzyl)benzamide;

1,2-Bis(4-trifluoromethylsulfonylphenyl)ethane;

N-(4-Trifluoromethylsulfonylbenzyl)-4-trifluoromethylsulfonylbenzamide;

N-(4-Trifluoromethylsulfonylbenzyl)benzamide;

Bis(4-Trifluoromethylsulfonylphenyl) disulfide;

Bis-(2-Nitro-4-trifluoromethylsulfonylphenyl) disulfide;

3,5-Bis-(4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;

[3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-phenyl]-acetic acid methyl ester;

3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;

1,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-cyclopentane;

4-Methyl-2,6-bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzoic acid methyl ester;

4-[2-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-ethoxy]-benzoic acid methyl ester;
4-[3-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-phenoxy]-benzoic acid;
1-(3,5-Bis-trifluoromethyl-phenyl)-5-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-
1*H*-pyrazole-3-carboxylic acid methyl ester;
{4-[4-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-
acetic acid ethyl ester;
4-[3-(4-Trifluoromethanesulfonyl-phenoxy)-phenoxy]-benzoic acid;
{4-[4-(4-Trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid
ethyl ester;
N-(3-Trifluoromethanesulfonyl-phenyl)-2-{2-[(3-trifluoromethanesulfonyl-
phenylcarbamoyl)-methyl]-phenyl}-acetamide;
N-(3-Trifluoromethanesulfonyl-phenyl)-2-{3-[(3-trifluoromethanesulfonyl-
phenylcarbamoyl)-methyl]-phenyl}-acetamide;
N-(3-Trifluoromethanesulfonyl-phenyl)-2-{4-[(3-trifluoromethanesulfonyl-
phenylcarbamoyl)-methyl]-phenyl}-acetamide;
3,6-Bis-(morpholin-4-ylmethyl)-2,5-bis-(2-nitro-4-trifluoromethanesulfonyl-
phenoxy)-benzene;
[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-dimethyl-amine;
N-(2-Ethylamino-5-trifluoromethanesulfonyl-phenyl)-2-(4-methanesulfonyl-phenyl)-
acetamide;
2-Hydroxy-5-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-terephthalic acid diethyl
ester;
{2-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;
{3-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;
{4-[(3-Trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetic acid;
3,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-benzamide;
3,5-Bis-(4-trifluoromethanesulfonyl-phenoxy)-benzoic acid;
N-(4-Trifluoromethanesulfonyl-phenyl)-2-{2-[(4-trifluoromethanesulfonyl-
phenylcarbamoyl)-methyl]-phenyl}-acetamide;
N-(4-Trifluoromethanesulfonyl-phenyl)-2-{3-[(4-trifluoromethanesulfonyl-
phenylcarbamoyl)-methyl]-phenyl}-acetamide;

N-(4-Trifluoromethanesulfonyl-phenyl)-2-{4-[(4-trifluoromethanesulfonyl-phenylcarbamoyl)-methyl]-phenyl}-acetamide;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoic acid methyl ester;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoic acid;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-pyridin-4-yl-benzamide;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-(4-methoxy-phenyl)-benzamide;

3-[4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzoylamino]-benzoic acid ethyl ester;

4-(1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-*N*-(2-pyrrolidin-1-yl-ethyl)-benzamide;

N-Ethyl-4-(1-ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazol-2-yl)-benzamide;

1-Ethyl-5-trifluoromethanesulfonyl-1*H*-benzoimidazole-2-carboxylic acid;

[2-(Benzoyl-butyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid methyl ester;

N-Benzyl-*N*-[butylcarbamoyl-(4-trifluoromethanesulfonyl-phenyl)-methyl]-benzamide;

N-[Butylcarbamoyl-(4-trifluoromethanesulfonyl-phenyl)-methyl]-*N*-(2-hydroxy-ethyl)-benzamide;

[2-(Acetyl-cyclopropyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Acetyl-methyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Benzoyl-cyclohexyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

N-Cyclohexyl-*N*-[(2,6-dimethyl-phenylcarbamoyl)-(4-trifluoromethanesulfonyl-phenyl)-methyl]-benzamide;

[2-(Acetyl-propyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetylamino]-acetic acid ethyl ester;

[2-(Acetyl-cyclohexyl-amino)-2-(4-trifluoromethanesulfonyl-phenyl)-acetyl-amino]-acetic acid ethyl ester;

{4-[4-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-benzenesulfonyl]-phenoxy}-acetic acid;

4-[2-(2-Nitro-4-trifluoromethanesulfonyl-phenoxy)-ethoxy]-benzoic acid;

2,5-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-terephthalic acid diethyl ester;

1-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-piperidine;

4-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-morpholine;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-(2-nitro-phenyl)-amine;

1-(2-Nitro-phenylamino)-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propan-2-ol;

[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propyl]-(4-nitro-phenyl)-amine;

1-(4-Nitro-phenylamino)-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propan-2-ol;

4-[2-Hydroxy-3-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propylamino]-benzenesulfonamide;

4-[2,3-Bis-(2-nitro-4-trifluoromethanesulfonyl-phenoxy)-propylamino]-benzenesulfonamide; or

Bis- {[4-(2-nitro-4-trifluoromethanesulfonyl)-phenoxy]-phenyl} sulfone.

44. (Original) The method of claim 39 wherein the compound is:

1,2-Bis(4-trifluoromethylsulfonamidophenyl)ethane;

1,2-Bis(2-methyl-4-trifluoromethylsulfonamidophenyl)ethane;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)-2,2-dimethylpropane;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)propane;

1,4-Bis(4-trifluoromethylsulfonamidophenoxy)butane;

1,4-Bis(4-trifluoromethylsulfonamidophenoxy)benzene;

1-(4-Aminophenoxy)-4-trifluoromethylsulfonamidophenoxy benzene;

Bis(4-trifluoromethylsulfonamidophenyl) ether;

1,3-Bis(4-trifluoromethylsulfonamidophenoxy)benzene;
2,5-Bis(4-trifluoromethylsulfonamidophenyl)-(1,3,4)oxadiazole;
Bis(4-trifluoromethylsulfonamidophenyl)-1,4-diisopropylbenzene;
5-Trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;
1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;
(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetic acid;
1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid phenylamide;
5-Trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid phenylamide;
3-[(1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;
3-[(5-Trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;
4-[(5-Trifluoromethanesulfonylamino-1*H*-indole-2-carbonyl)-amino]-benzoic acid;
4-[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-benzoic acid;
3-[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-benzoic acid;
4-[[2-(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetylamino]-methyl]-benzoic acid;
(2-Methyl-5-trifluoromethanesulfonylamino-indol-1-yl)-acetic acid *tert*-butyl ester;
1-Methyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;
6-Trifluoromethanesulfonylamino-naphthalene-2-carboxylic acid;
N,N-Bis[(6-carboxyl-naphthalen-2-yl)methyl] trifluoromethanesulfonamide;
6-[(Methyl-trifluoromethanesulfonyl-amino)-methyl]-naphthalene-2-carboxylic acid;
3-({6-[(Methyl-trifluoromethanesulfonyl-amino)-methyl]-naphthalene-2-carbonyl}-amino)-benzoic acid;
1-*tert*-Butoxycarbonylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;
1-Carboxymethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;
1-*tert*-Butoxycarbonylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;

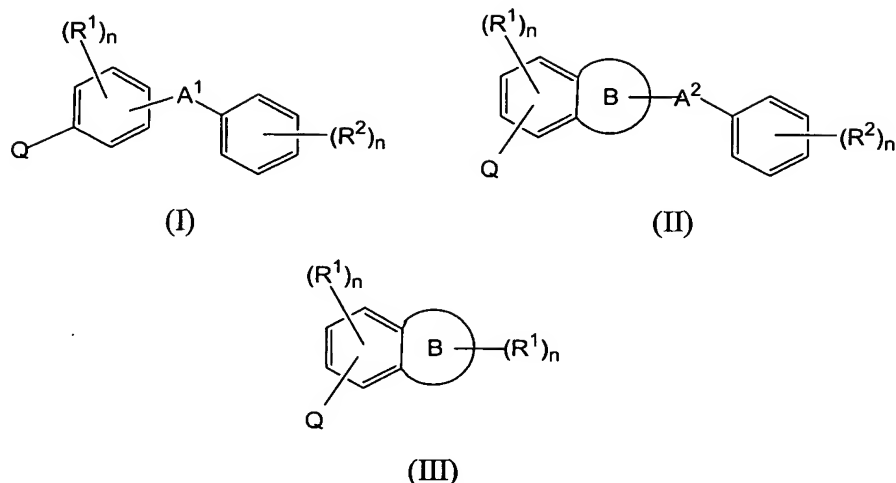
1-Carboxymethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid;
1-Carboxymethyl-5-(*N,N*-ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid ethyl ester;
1-*tert*-Butoxycarbonylmethyl-5-(*N,N*-ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid ethyl ester;
1-Carboxymethyl-5-(*N,N*- ditrifluoromethanesulfonyl)amino-1*H*-indole-2-carboxylic acid;
1-Cyclohexylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid ethyl ester;
1-Benzyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid; or
1-Cyclohexylmethyl-5-trifluoromethanesulfonylamino-1*H*-indole-2-carboxylic acid.

45. (Original) The method of claim 39 wherein said cancer is a solid tumor.

46. (Original) The method of claim 39 wherein said cancer is selected from the group consisting of glioma, melanoma, adenocarcinoma, Kaposi's sarcoma and hemangioma.

47. (Original) The method of claim 39 wherein said cancer is selected from the group consisting of ovarian, breast, lung, pancreatic, liver, prostate, colon, testicular, and epidermoid cancer.

48. (Original) A method for regulating, inhibiting or modulating protein tyrosine phosphatase signal transduction in a cell which comprises administering to the cell an effective amount of a compound having the formula:



or a pharmaceutically acceptable salt or solvate thereof, wherein:

Q is CF_3SO_2 , $CF_3SO_2NR^3$, $CF_3SO_2R^4$ or $CF_3SO_2N(R^3)R^4$, wherein R^3 is H, alkoxy, acyl or C₁-C₃ alkyl, each of which may be substituted or unsubstituted, and R^4 is methylene which may be substituted or unsubstituted;

each R^1 is independently C₁-C₃ alkyl, C₁-C₃ haloalkyl, CN, $(C=O)OR$, $(C=O)R^5$, H, halo, NHR, $NH(C=O)OR$, $NH(C=O)R^5$, NO_2 , $NHSO_2R^5$, $O(C=O)R$, OR, OH, SO_2R^5 , $R^4SO_2CF_3$ or tetrazole, wherein R^5 is CF_3 , C₁-C₃ alkyl, NHR and wherein R is H, C₁-C₃ alkyl, aryl or heteroaryl, which may be substituted or unsubstituted;

each R^2 is independently C₁-C₃ alkyl, C₁-C₃ haloalkyl, CN, $(C=O)OR$, $(C=O)R^5$, H, halo, $O(C=O)R$, OR, OH, NHR, $NH(C=O)OR$, $NH(C=O)R^5$, NO_2 , $NHSO_2R^5$, SO_2R^5 , tetrazole, or X₁-R₆-X₂ wherein X₁ may be present or absent and if present is O, N, $(C=O)$, $(C=O)NH$, $NH(C=O)$, SO_2NH , $NHSO_2$, R₆ is C₁-3 alkylene which may be substituted or unsubstituted and X₂ is CF_3 , $(C=O)OR$, $(C=O)R^5$, H, $NH(C=O)R^5$, $NH(C=O)OR$, $NHSO_2R^5$, NRR^3 , $O(C=O)R$, OR, SO_2R^5 , tetrazole;

each n is independently from 0 to 3;

ring B is an aryl, carbocyclic, heteroaryl, heterocyclic or phenyl ring which may be substituted or unsubstituted;

A^1 is a linkage in which the shortest path is 2-8 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with a single nitrogen, oxygen or sulfur, or combination of nitrogen, oxygen and sulfur; the linkage may be or may contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which

may be directly in the linkage or appended to the linkage; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene, alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkyloxy, alkyloxyaryloxyalkyl, alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, N-sulfonamido, N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl, aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxycarbonyl, aryloxysulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, disulfide, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy, sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, ureido, which may be substituted or unsubstituted;

A² is a linkage in which the shortest path is 0-6 atoms in length wherein the atoms in the linkage are carbon which may be substituted or unsubstituted or the carbon replaced with a single nitrogen, oxygen or sulfur, or combination of nitrogen, oxygen and sulfur; the linkage may be or may contain an aryl, carbocyclic, heteroaryl, heterocyclic or a phenyl ring, which may be directly in the linkage or appended to the linkage; the linkage may be single atom C, O, S or N which may be substituted or unsubstituted; the linkage may be acylalkyl, alkenylene, alkoxy, alkoxyalkyl, alkoxyamino, alkoxyarylalkoxy, alkoxyarylalkyl, alkoxyarylamino, alkoxyaryloxyalkyl, alkylamino, alkylaminoalkyl, alkylaminoarylaminoalkyl, alkylaryl, alkylarylalkyl, alkylarylamino, alkylaryloxy, alkylene, alkylenediamine, alkylenedioxy, alkyloxy, alkyloxyaryl, alkyloxyarylalkyloxy, alkyloxyaryloxyalkyl, alkylsulfonylamino, alkylthio, alkylthioalkyl, alkynylene, N-sulfonamido, N-amido, aminoalkyl, aminoalkylamino, aminoalkylarylalkyl, aminoalkylarylalkylamino, aminoalkylaryloxy, aminoalkyloxy, aminoaryl, aminoarylalkyl,

aminoarylcarbonyl, aminoaryloxy, aminoaryloxyalkyl, aminoarylsulfonyl, aryl, arylamino, ortho or para aryldioxy, substituted meta-aryldioxy, aryldiamine, aryloxy, aryloxyalkyl, aryloxyamino, aryloxyaminoalkyl, aryloxycarbonyl, aryloxysulfonyl, benzimidazole, benzo[b]furan, benzo[b]thiophene, C-amido, carbonylarylamino, carbonylarylcarbonyl, carbonylaryloxy, chromene, cycloalkylene, furan, haloalkyl, imidazole, imidazolidine, imidazoline, indole, isothiazole, isoxazole, morpholine, oxadiazole, oxazole, oxirane, parathiazine, phenothiazine, piperazine, piperidine, purine, pyran, pyrazine, pyrazole, pyrazolidine, pyrimidine, pyridine, pyrrole, pyrrolidine, quinoline, sulfonamido, sulfonylalkyl, sulfonylarylamino, sulfonylaryloxy, sulfonylarylsulfonyl, thiadiazole, thiazole, thiophene, triazine, triazole, unsubstituted azeridine, ureido, which may be substituted or unsubstituted

wherein said compound regulates, inhibits or modulates protein tyrosine phosphatase signal transduction.

49 – 89. (Canceled)